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&lt;210&gt; 778

&lt;211&gt; 1095

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 778

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&lt;211&gt; 3639

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Tyr Gly Leu Met Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile
      170     175     180
Ser Arg Ser Ser Glu Glu Asn Ile Val Ala Ile Gly Ile Ala Ala Trp
      185     190     195
Gly Met Val Ser Asn Arg Asp Thr Leu Ile Arg Asn Cys Asp Ala Glu
      200     205     210
Gly Tyr Phe Leu Ala Gln Tyr Leu Met Asp Asp Phe Thr Arg Asp Pro
      215     220     225
Leu Tyr Ile Leu Asp Asn Asn His Thr His Leu Leu Val Asp Asn
      230     235     240
Gly Cys His Gly His Pro Thr Val Glu Ala Lys Leu Arg Asn Gln Leu
      245     250     255
Gln Lys Tyr Ile Ser Glu Arg Thr Ile Gln Asp Ser Asn Tyr Gly Gly
      260     265     270
Lys Ile Pro Ile Val Cys Phe Ala Gln Gly Gly Lys Glu Thr Leu
      275     280     285
Lys Ala Ile Asn Thr Ser Ile Lys Asn Lys Ile Pro Cys Val Val Val
      290     295     300

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305 310 315 320  
 Glu Gly Ser Gly Gln Ile Ala Asp Val Ile Ala Ser Leu Val Glu Val  
 325 330 335  
 Glu Asp Ala Leu Thr Ser Ser Ala Val Lys Glu Lys Leu Val Arg Phe  
 340 345 350  
 Leu Pro Arg Thr Val Ser Arg Leu Pro Glu Glu Glu Thr Glu Ser Trp  
 355 360 365  
 Ile Lys Trp Leu Lys Glu Ile Leu Glu Cys Ser His Leu Leu Thr Val  
 370 375 380  
 Ile Lys Met Glu Glu Ala Gly Asp Glu Ile Val Ser Asn Ala Ile Ser  
 385 390 395 400  
 Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn  
 405 410 415  
 Trp Asn Gly Gln Leu Lys Leu Leu Leu Glu Trp Asn Gln Leu Asp Leu  
 420 425 430  
 Ala Asn Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Ser Ala Asp  
 435 440 445  
 Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe  
 450 455 460  
 Val Arg Leu Phe Leu Glu Asn Gly Leu Asn Leu Arg Lys Phe Leu Thr  
 465 470 475 480  
 His Asp Val Leu Thr Glu Leu Phe Ser Asn His Phe Ser Thr Leu Val  
 485 490 495  
 Tyr Arg Asn Leu Gln Ile Ala Lys Asn Ser Tyr Asn Asp Ala Leu Leu  
 500 505 510  
 Thr Phe Val Trp Lys Leu Val Ala Asn Phe Arg Arg Gly Phe Arg Lys  
 515 520 525  
 Glu Asp Arg Asn Gly Arg Asp Glu Met Asp Ile Glu Leu His Asp Val  
 530 535 540  
 Ser Pro Ile Thr Arg His Pro Leu Gln Ala Leu Phe Ile Trp Ala Ile  
 545 550 555 560  
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 565 570 575  
 Gly Cys Thr Leu Ala Ala Leu Gly Ala Ser Lys Leu Leu Lys Thr Leu  
 580 585 590  
 Ala Lys Val Lys Asn Asp Ile Asn Ala Ala Gly Glu Ser Glu Glu Leu  
 595 600 605  
 Ala Asn Glu Tyr Glu Thr Arg Ala Val Glu Leu Phe Thr Glu Cys Tyr  
 610 615 620  
 Ser Ser Asp Glu Asp Leu Ala Glu Gln Leu Leu Val Tyr Ser Cys Glu  
 625 630 635 640  
 Ala Trp Gly Gly Ser Asn Cys Leu Glu Leu Ala Val Glu Ala Thr Asp  
 645 650 655  
 Gln His Phe Ile Ala Gln Pro Gly Val Gln Asn Phe Leu Ser Lys Gln  
 660 665 670  
 Trp Tyr Gly Glu Ile Ser Arg Asp Thr Lys Asn Trp Lys Ile Ile Leu  
 675 680 685  
 Cys Leu Phe Ile Ile Pro Leu Val Gly Cys Gly Phe Val Ser Phe Arg  
 690 695 700  
 Lys Lys Pro Val Asp Lys His Lys Lys Leu Leu Trp Tyr Tyr Val Ala  
 705 710 715 720  
 Phe Phe Thr Ser Pro Phe Val Val Phe Ser Trp Asn Val Val Phe Tyr  
 725 730 735  
 Ile Ala Phe Leu Leu Leu Phe Ala Tyr Val Leu Leu Met Asp Phe His  
 740 745 750  
 Ser Val Pro His Pro Pro Glu Leu Val Leu Tyr Ser Leu Val Phe Val  
 755 760 765  
 Leu Phe Cys Asp Glu Val Arg Gln Trp Tyr Val Asn Gly Val Asn Tyr

296

770						775						780					
Phe	Thr	Asp	Leu	Trp	Asn	Val	Met	Asp	Thr	Leu	Gly	Leu	Phe	Tyr	Thr	Phe	800
785						790				795							806
Ile	Ala	Gly	Ile	Val	Phe	Arg	Leu	His	Ser	Ser	Asn	Lys	Ser	Ser	Leu		
				805						810						815	
Tyr	Ser	Gly	Arg	Val	Ile	Phe	Cys	Leu	Asp	Tyr	Ile	Ile	Phe	Thr	Leu		
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Arg	Leu	Ile	His	Ile	Phe	Thr	Val	Ser	Arg	Asn	Leu	Gly	Pro	Lys	Ile		
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Ile	Met	Leu	Gln	Arg	Met	Leu	Ile	Asp	Val	Phe	Phe	Phe	Leu	Phe	Leu		
				850						855					860		
Phe	Ala	Xaa	Trp	Met	Val	Ala	Phe	Gly	Val	Ala	Arg	Gln	Gly	Ile	Leu		
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Arg	Gln	Asn	Glu	Gln	Arg	Trp	Arg	Trp	Ile	Abs	Phe	Arg	Ser	Val	Ile	Tyr	
				885						890					895		
Glu	Pro	Tyr	Leu	Ala	Met	Phe	Gly	Gln	Val	Pro	Ser	Asp	Val	Asp	Gly		
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Thr	Thr	Tyr	Asp	Phe	Ala	His	Cys	Thr	Phe	Thr	Gly	Asn	Glu	Ser	Lys		
				915						920					925		
Pro	Leu	Cys	Val	Glu	Leu	Asp	Glu	His	Asn	Leu	Pro	Arg	Phe	Pro	Glu		
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Trp	Ile	Thr	Ile	Pro	Leu	Val	Cys	Ile	Tyr	Met	Leu	Ser	Thr	Asn	Ile		
945					950					955					960		
Leu	Leu	Val	Asn	Leu	Leu	Val	Ala	Met	Phe	Gly	Tyr	Thr	Val	Gly	Thr		
				965						970					975		
Val	Gln	Glu	Asn	Asn	Asp	Gln	Val	Trp	Lys	Phe	Gln	Arg	Tyr	Phe	Leu		
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Val	Gln	Glu	Tyr	Cys	Ser	Arg	Leu	Asn	Ile	Pro	Phe	Pro	Phe	Ile	Val		
				995						1000					1005		
Phe	Ala	Tyr	Phe	Tyr	Met	Val	Val	Lys	Lys	Cys	Phe	Lys	Cys	Cys	Cys		
				1010						1015					1020		
Gly	Glu	Lys	Asn	Met	Glu	Ser	Ser	Val	Cys	Cys	Phe	Lys	Asn	Gln	Asp		
1025					1030					1035					1040		
Asn	Glu	Thr	Leu	Ala	Trp	Glu	Gly	Val	Met	Lys	Glu	Asn	Tyr	Leu	Val		
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Lys	Ile	Asn	Thr	Lys	Ala	Asn	Asp	Thr	Ser	Glu	Glu	Met	Arg	His	Arg		
				1060						1065					1070		
Phe	Arg	Gln	Leu	Asp	Thr	Lys	Leu	Asn	Asp	Leu	Lys	Gly	Leu	Leu	Lys		
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Glu	Ile	Ala	Asn	Lys	Ile	Lys											
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<210> 781
<211> 15
<212> PRT
<213> Homo sapiens
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<213> Homo sapiens
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 <212> DNA  
 <213> Homo sapiens  
  
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 <400> 796  
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 <210> 797



300

&lt;213&gt; Homo sapiens

&lt;400&gt; 803

Phe Gln Asn Ser Tyr Thr Ile Gly Leu Gly Leu His Ser Leu  
                                   5                                  10

&lt;210&gt; 804

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 804

Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu  
                                   5                                  10                                  15

&lt;210&gt; 805

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 805

His Pro Gln Trp Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser  
                                   5                                  10                                  15

&lt;210&gt; 806

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 806

Ser Gly Val Leu Val His Pro Gln Trp Val Leu Ser Ala Ala His  
                                   5                                  10                                  15

&lt;210&gt; 807

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 807

Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp Val  
                                   5                                  10                                  15

&lt;210&gt; 808

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 808

Ala Leu Val Met Gln Asn Glu Leu Phe Cys Ser Gly Val Leu Val  
                                   5                                  10                                  15

&lt;210&gt; 809

301

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                           5                          10                          15

Ser

<210> 810  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens  
  
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                           5                          10                          15

<210> 811  
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 <212> PRT  
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                           5                          10                          15

<210> 812  
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                           5                          10                          15

<210> 813  
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 <212> PRT  
 <213> Homo sapiens  
  
 <400> 813  
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                           5                          10                          15

<210> 814  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 814

Arg Pro Leu Leu Ala Asn Asp Leu Met Len Ile Lys Len Asp Glu  
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<210> 815  
<211> 35  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> PCR primer

<400> 815  
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<210> 816  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> PCR primer

<400> 816  
ccgctcgagt ccaccccaag ctccacagg 29

<210> 817  
<211> 1959  
<212> DNA  
<213> Homo sapiens

<400> 817  
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cggagccacag acttgtctta cagtgaagc gacttggtga attttattca agcaaatctt 120  
aagaacaagag aatgtgtctt cttaaccaaa gattccaagg ccacggagaa tgtgtgcaag 180  
tgtgtgatag ccacagagcca gcaactggaa ggcaccaga tcacccaag tgagaatgg 240  
aactacaaga aacacaccaa ggaatttctt accgcgcct ttggggatat tcagtttgag 300  
acctggggga agaaggggaa gtatatagc ctgtcttgag acacggagcgc ggaatcctt 360  
tacgagctgc tgacccagca ctggcaacct asaacaacca acctggtcat tctgtgacc 420  
ggggcgccca agaacttgcg cctgaagcgc cgcctgcgca agatcttcag ccgctctc 480  
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303

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 actgagtgtt acagcagca tgaagacttg gcagaacagc tgcgtgtata tctctgigaa 1920  
 gctgggggtg gactcagaga ccaccaccac caccactga 1959

&lt;210&gt; 819

&lt;211&gt; 652

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 819

Met Arg Asn Arg Arg Asn Asp Thr Leu Asp Ser Thr Arg Thr Leu Tyr  
 3 10 15  
 Ser Ser Ala Ser Arg Ser Thr Asp Leu Ser Tyr Ser Glu Ser Asp Leu  
 20 25 30  
 Val Asn Phe Ile Gln Ala Asn Phe Lys Lys Arg Glu Cys Val Phe Phe  
 35 40 45  
 Thr Lys Asp Ser Lys Ala Thr Glu Asn Val Cys Lys Cys Gly Tyr Ala  
 50 55 60  
 Gln Ser Gln His Met Glu Gly Thr Gln Ile Asn Gln Ser Glu Lys Trp  
 65 70 75 80  
 Asn Tyr Lys Lys His Thr Lys Glu Phe Pro Thr Asp Ala Phe Gly Asp  
 85 90 95  
 Ile Gln Phe Glu Thr Leu Gly Lys Lys Gly Lys Tyr Ile Arg Leu Ser  
 100 105 110  
 Cys Asp Thr Asp Ala Gln Ile Leu Tyr Glu Leu Leu Thr Gln His Trp  
 115 120 125  
 His Leu Lys Thr Pro Asn Leu Val Ile Ser Val Thr Gly Gly Ala Lys  
 130 135 140  
 Asn Phe Ala Leu Lys Pro Arg Met Arg Lys Ile Phe Ser Arg Leu Ile  
 145 150 155 160  
 Tyr Ile Ala Gln Ser Lys Gly Ala Trp Ile Leu Thr Gly Gly Thr His  
 165 170 175  
 Tyr Gly Leu Met Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile  
 180 185 190  
 Ser Arg Ser Ser Glu Glu Asn Ile Val Ala Ile Gly Ile Ala Ala Trp  
 195 200 205  
 Gly Met Val Ser Asn Arg Asp Thr Leu Ile Arg Asn Cys Asp Ala Glu  
 210 215 220  
 Gly Tyr Phe Leu Ala Gln Tyr Leu Met Asp Asp Phe Thr Arg Asp Pro  
 225 230 235 240  
 Leu Tyr Ile Leu Asp Asn Asn His Thr His Leu Leu Leu Val Asp Asn  
 245 250 255  
 Gly Cys His Gly His Pro Thr Val Glu Ala Lys Leu Arg Asn Gln Leu  
 260 265 270  
 Glu Lys Tyr Ile Ser Glu Arg Thr Ile Gln Asp Ser Asn Tyr Gly Gly  
 275 280 285  
 Lys Ile Pro Ile Val Cys Phe Ala Gln Gly Gly Gly Lys Glu Thr Leu  
 290 295 300  
 Lys Ala Ile Asn Thr Ser Ile Lys Asn Lys Ile Pro Cys Val Val Val  
 305 310 315 320  
 Glu Gly Ser Gly Gln Ile Ala Asp Val Ile Ala Ser Leu Val Glu Val  
 325 330 335  
 Glu Asp Ala Leu Thr Ser Ser Ala Val Lys Glu Lys Leu Val Arg Phe

304

340 345 350  
 Leu Pro Arg Thr Val Ser Arg Leu Pro Glu Glu Glu Thr Glu Ser Trp  
 355 360 365  
 Ile Lys Trp Leu Lys Glu Ile Leu Glu Cys Ser His Leu Leu Thr Val  
 370 375 380  
 Ile Lys Met Glu Glu Ala Gly Asp Glu Ile Val Ser Asn Ala Ile Ser  
 385 390 395 400  
 Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn  
 405 410 415  
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 420 425 430  
 Ala Asn Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Ser Ala Asp  
 435 440 445  
 Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe  
 450 455 460  
 Val Arg Leu Phe Leu Glu Asn Gly Leu Asn Leu Arg Lys Phe Leu Thr  
 465 470 475 480  
 His Asp Val Leu Thr Glu Leu Phe Ser Asn His Phe Ser Thr Leu Val  
 485 490 495  
 Tyr Arg Asn Leu Gln Ile Ala Lys Asn Ser Tyr Asn Asp Ala Leu Leu  
 500 505 510  
 Thr Phe Val Trp Lys Leu Val Ala Asn Phe Arg Arg Gly Phe Arg Lys  
 515 520 525  
 Glu Asp Arg Asn Gly Arg Asp Glu Met Asp Ile Glu Leu His Asp Val  
 530 535 540  
 Ser Pro Ile Thr Arg His Pro Leu Gln Ala Leu Phe Ile Trp Ala Ile  
 545 550 555 560  
 Leu Gln Asn Lys Lys Glu Leu Ser Lys Val Ile Trp Glu Gln Thr Arg  
 565 570 575  
 Gly Cys Thr Leu Ala Ala Leu Gly Ala Ser Lys Leu Leu Lys Thr Leu  
 580 585 590  
 Ala Lys Val Lys Asn Asp Ile Asn Ala Ala Gly Glu Ser Glu Glu Leu  
 595 600 605  
 Ala Asn Glu Tyr Glu Thr Arg Ala Val Glu Leu Phe Thr Glu Cys Tyr  
 610 615 620  
 Ser Ser Asp Glu Asp Leu Ala Glu Gln Leu Leu Val Tyr Ser Cys Glu  
 625 630 635 640  
 Ala Trp Gly Gly Leu Glu His His His His His His  
 645 650

&lt;210&gt; 319

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 319

Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe  
 1 5 10 15  
 Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile Arg Ser  
 20 25 30  
 Gly Gly Gly Ser Pro Thr Val His Ile Gly Pro Thr Ala Phe Leu Gly  
 35 40 45  
 Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val Gln Arg Val  
 50 55 60  
 Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr Gly Asp Val  
 65 70 75 80  
 Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr Ala Met Ala



305

	85		90		95										
Asp	Ala	Leu	Asn	Gly	His	His	Pro	Gly	Asp	Val	Ile	Ser	Val	Asn	Trp
	100						105						110		
Gln	Thr	Lys	Ser	Gly	Gly	Thr	Arg	Thr	Gly	Asn	Val	Thr	Leu	Ala	Glu
	115						120						125		
Gly	Pro	Pro	Ala												
	130														

&lt;210&gt; 820

&lt;211&gt; 36

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 820

ggggaaattca tgatccggga gaaatttgcc cactgc

36

&lt;210&gt; 821

&lt;211&gt; 33

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 821

gggtctcgagt caggagtttg agaccagcct ggc

33

&lt;210&gt; 822

&lt;211&gt; 675

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 822

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accggtcata	tggggcctac	cgccttcttc	ggcttgggtg	ttgtcgacaa	caacggcaac	180
ggcgccagcg	tccaacccgt	ggtcgggagc	gctccggcgg	caagctctcg	catctccacc	240
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ggcagccgta	cagggaacgt	gacattggcc	gagggscccc	cggcgcaatt	catgatccgg	420
ggcaaatbtg	ccacactgcac	cgtgctaac	attgcacaca	gattgaacac	catbattgac	480
agcgacaaga	taattggtttt	agattcagga	agactgaag	aataatgatg	gcocgatggt	540
ttgctgcata	ataaagagag	cctattttac	aagatgggtc	aacaaactgg	caaggcagaa	600
gcgcgtgcc	tcactgaac	agcaaaacag	agatggggtt	tcaccatggt	ggccagcgtg	660
gtctcaaac	cctga					675

&lt;210&gt; 823

&lt;211&gt; 291

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 823  
atggggatcc ggggaaatt tgcaccactgc accgtgctaa ccattgcaca cagattgaac 60  
accattattg acagcgacaa gataatgggt ttgatttcag gaagctgaa agaetatgat 120  
gagccgatg ttttctgca aaataaagag agcctatttt acaagatggt gcaacacatg 180  
ggcaaggag gagccctgc cctcactgaa acagcaaaac agagatgggg tttaaccatg 240  
ttggccagcg tgggtcdaaa ctccctcgag caaccacacc accaccactg a 291

<210> 824  
<211> 1074  
<212> DNA  
<213> Homo sapiens

<400> 824  
atgtcagcca ttgagaggggt gtacagaggca atcgtcagaa tccgaagaat ccagaccctt 60  
ttgctacttg atgagatatt acagcgcaac cgtcagctgc cgtcagatgg taanaagatg 120  
gtgcatgtgc aggaattttac tgccttttgg gataaggcat cagagacccc aactctacaa 180  
ggccttctct ttaactgtcag accctggcgaa ttgttagctg tggtcggccc cgtgggagca 240  
gggaagtcsl cactgtlaag tgcctgtctc ggggaatttg ccccaagtcg cgggctgttc 300  
aggtgtcgtg gaagaattgc ctatgtgtct cagcagccct ggtgttctc ggggaactctg 360  
aggatanta ttttatttgg gaagaataac gaaagagaa gatataaaaa agtcataaag 420  
gcttctgtct tgaanaaggat ttacagctg ttggaggatg gtgatctgac tgtgatagga 480  
gctcggggaa ccacgcctgag tggagggcag aaagcagcgg taaactctgc aagagcagtg 540  
tatcaagact ctgactctca tctcctggac gatcctctca gtgcagtaga tccgggaagt 600  
agcaagact tgttogaact gtgtatttgc caaatittgc atgagaagat caaatattta 660  
gtgactcact agttgcagta cctcaaacct gcaagtcaga ttctgatatt gaagatggt 720  
aaatgtgttc agaaggggac ttacactgag ttcttaaaat ctgtgtataga ttttggctcc 780  
cttttaaga aggataatga ggaagtgaa caacctccag ttccaggaac tcccacata 840  
aggaatccta cctctcaga gtctctgggt tgggtctcac actctctag accctcttg 900  
aaagatgtgt ctccgagag ccaagataca gagaatgtcc cagttacact atcagaggag 960  
aacctgtctg asggaaaagt tggttttcag gctataaga attacttcag agctgtgct 1020  
cactggatg ttttcaattt ccttattctc gaggaccacc accaccacca ctga 1074

<210> 825  
<211> 224  
<212> PRT  
<213> Homo sapiens

<400> 825  
Met His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu  
5 10 15  
Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala  
20 25 30  
Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala  
35 40 45  
Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val  
50 55 60  
Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr  
65 70 75 80  
Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr  
85 90 95  
Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser  
100 105 110  
Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr  
115 120 125  
Leu Ala Gly Gly Pro Pro Ala Glu Phe Met Ile Arg Glu Lys Phe Ala  
130 135 140  
His Cys Thr Val Leu Thr Ile Ala His Arg Leu Asn Thr Ile Ile Asp

307

145	150	155	160
Ser Asp Lys Ile Met Val Leu Asp Ser Gly Arg Leu Lys Glu Tyr Asp			
	165	170	175
Glu Pro Tyr Val Leu Leu Gln Asn Lys Glu Ser Leu Phe Tyr Lys Met			
	180	185	190
Val Gln Gln Leu Gly Lys Ala Glu Ala Ala Leu Thr Glu Thr Ala			
	195	200	205
Lys Gln Arg Trp Gly Phe Thr Met Leu Ala Arg Leu Val Ser Asn Ser			
	210	215	220

&lt;210&gt; 826

&lt;211&gt; 357

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 626

Met Ser Ala Ile Glu Arg Val Ser Glu Ala Ile Val Ser Ile Arg Arg	5	10	15
Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile Ser Gln Arg Asn Arg Gln	20	25	30
Leu Pro Ser Asp Gly Lys Lys Met Val His Val Gln Asp Phe Thr Ala	35	40	45
Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr Leu Gln Gly Leu Ser Phe	50	55	60
Thr Val Arg Pro Gly Glu Leu Leu Ala Val Val Gly Pro Val Gly Ala	65	70	75
Gly Lys Ser Ser Leu Leu Ser Ala Val Leu Gly Glu Leu Ala Pro Ser	80	85	90
His Gly Leu Val Ser Val His Gly Arg Ile Ala Tyr Val Ser Gln Gln	95	100	105
Pro Trp Val Phe Ser Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly Lys	110	115	120
Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala Leu	125	130	135
Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly Asp Leu Thr Val Ile Gly	140	145	150
Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln Lys Ala Arg Val Asn Leu	155	160	165
Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile Tyr Leu Leu Asp Asp Pro	170	175	180
Leu Ser Ala Val Asp Ala Glu Val Ser Arg His Leu Phe Glu Leu Cys	185	190	195
Ile Cys Gln Ile Leu His Glu Lys Ile Thr Ile Leu Val Thr His Gln	200	205	210
Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile Leu Ile Leu Lys Asp Gly	215	220	225
225 Lys Met Val Gln Lys Gly Thr Tyr Thr Glu Phe Leu Lys Ser Gly Ile	230	235	240
240 Asp Phe Gly Ser Leu Leu Lys Lys Asp Asn Glu Glu Ser Glu Gln Pro	245	250	255
255 Pro Val Pro Gly Thr Pro Thr Leu Arg Asn Arg Thr Phe Ser Glu Ser	260	265	270
270 Ser Val Trp Ser Gln Gln Ser Ser Arg Pro Ser Leu Lys Asp Gly Ala	275	280	285
285 Leu Glu Ser Gln Asp Thr Glu Asn Val Pro Val Thr Leu Ser Gln Glu	290	295	300
300 Asn Arg Ser Glu Gly Lys Val Gly Phe Gln Ala Tyr Lys Asn Tyr Phe	305	310	315
	320	325	330

308

	325		330		335
Arg	Ala	Gly	Ala	His	Trp
			Ile	Val	Phe
			Ile	Phe	Leu
			Ile	Leu	Glu
			His		
	340		345		350
His	His	His	His	His	
	355				

<210> E27  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> E27	
Met	Gly
	Ile
	Arg
	Glu
	Lys
	Phe
	Ala
	His
	Cys
	Thr
	Val
	Leu
	Thr
	Ile
	Ala
	5
	10
	15
His	Arg
	Leu
	Asn
	Thr
	Ile
	Ile
	Asp
	Ser
	Asp
	Lys
	Ile
	Met
	Val
	Leu
	Leu
	Asp
	20
	25
	30
Ser	Gly
	Arg
	Leu
	Lys
	Glu
	Tyr
	Asp
	Glu
	Pro
	Tyr
	Val
	Leu
	Leu
	Gln
	Asn
	35
	40
	45
Lys	Glu
	Ser
	Leu
	Phe
	Tyr
	Lys
	Met
	Val
	Gln
	Gln
	Leu
	Gly
	Lys
	Ala
	Glu
	50
	55
	60
Ala	Ala
	Ala
	Leu
	Thr
	Glu
	Thr
	Ala
	Lys
	Gln
	Arg
	Tyr
	Gly
	Phe
	Thr
	Met
	65
	70
	75
	80
Leu	Ala
	Arg
	Leu
	Val
	Ser
	Asn
	Ser
	Leu
	Glu
	His
	His
	His
	His
	His
	His
	85
	90
	95

<210> E28  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> E28  
 egcccatggg gatcggggag aattttgccc actgc 35

<210> E29  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> E29  
 egcctcgagg gagtttgaga ccagcctggc caaca 35

<210> E30  
 <211> 39  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> E30

gcattggacca tatgtcagcc attgagggg tgtcagag 30

<210> 831  
<211> 34  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> PCR primer

<400> 831  
ccgtctgaga ataaggaasa tgaagcaat ccag 34

<210> 832  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> PCR primer

<400> 832  
gttgaaattca tgcacgggcc ccaggtg 27

<210> 833  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> PCR primer

<400> 833  
cccatcgagt cactatgggtc tgcctcttga 30

<210> 834  
<211> 915  
<212> DNA  
<213> Homo sapiens

<400> 834  
atgcctaccc atcaccatca caaggccggc tccgataact tccagctgtc ccaggggtggg 60  
cagggtatcg ccattccgat cgggcccggc atggcgatcg cggcccagat caagcttccc 120  
accgttcata tggggccctac cgccttcttc ggcttgggtg ttgtcgacaa caacggcaac 180  
ggcgacagag tccaaacgct ggtcggggag cctccggcgg caagtctcgg catctccacc 240  
ggcgacgtga tccacggcgt ggaaggcgct ccgatcaact cggcccaacc gatggcggaac 300  
ggccttaacg ggcctcatcc cgttgacgtc atctcgttga cctggcaaac caagtctggg 360  
ggcagcgtga cagggaacgt gacattggcc gagggaaccc cggccgaatt calgcaoggg 420  
cccacaggtgc tggcagcgtg ctccagagtgt gcttgcctcg ccttggotgc cccctctcgg 480  
gggtgcgtgc tggagggggt ggaccggcca ccacccctac ccagtcaagg aagtggtatgg 540  
ccatgttccc acagccttag tgcctgcacc ctgattggtg atggagcaaa ggcccttagga 600  
aaagcagatg gcccttggcc ctaccttttt gttagaagaa ctgatgttcc atgtctctga 660  
ggaggtgagg ttggtggtg tgcgccagc tctggcgcg ccttcgaga ggtgactggt 720  
tgtcttttgg gccctcttgg ccttgcaccg catgcacaag cctcagtgct actactgtgc 780

310

```

taccaatgga ggcataatagg ggaaacagagc agccatctca ggagcaaggt gtatgctgoc 840
tttgggggct ccaagtctctg cctcaagggt cttatgtcac tgtggggcttc ttggttgtca 900
aaagccacac cataa
                                     915

```

&lt;210&gt; 835

&lt;211&gt; 304

&lt;212&gt; 发明

<213> Homo sapiens

<400> 835

Met	His	His	His	His	His	His	Thr	Ala	Ala	Ser	Asp	Asn	Phe	Gln	Leu
									10					15	
Ser	Gln	Gly	Gly	Gln	Gly	Phe	Ala	Ile	Pro	Ile	Gly	Gln	Ala	Met	Ala
			20				25					30			
Ile	Ala	Gly	Gln	Ile	Lys	Leu	Pro	Thr	Val	His	Ile	Gly	Pro	Thr	Ala
			35				40					45			
Phe	Leu	Gly	Leu	Gly	Val	Val	Asp	Asn	Asn	Gly	Asn	Gly	Ala	Arg	Val
			50				55				60				
Gln	Arg	Val	Val	Gly	Ser	Ala	Pro	Ala	Ala	Ser	Leu	Gly	Ile	Ser	Thr
					70					75				80	
Gly	Asp	Val	Ile	Thr	Ala	Val	Asp	Gly	Ala	Pro	Ile	Asn	Ser	Ala	Thr
					85					90				95	
Ala	Met	Ala	Asp	Ala	Leu	Asn	Gly	His	His	Pro	Gly	Asp	Val	Ile	Ser
			100					105					110		
Val	Thr	Trp	Gln	Thr	Lys	Ser	Gly	Gly	Thr	Arg	Thr	Gly	Asn	Val	Thr
			115				120					125			
Leu	Ala	Glu	Gly	Pro	Pro	Ala	Glu	Phe	Met	His	Gly	Pro	Gln	Val	Leu
			130				135					140			
Ala	Arg	Cys	Ser	Glu	Cys	Ala	Cys	Pro	Ala	Leu	Ala	Ala	Thr	Ser	Ala
			145			150				155				160	
Gly	Val	Arg	Leu	Glu	Gly	Val	Asp	Arg	Pro	Pro	Thr	Leu	Pro	Ser	Gln
			165					170					175		
Gly	Ser	Gly	Trp	Pro	Cys	Ser	His	Ser	Leu	Ser	Gly	Cys	His	Leu	Met
			180				185						190		
Ala	Asp	Gly	Ala	Lys	Ala	Leu	Gly	Lys	Ala	Asp	Gly	Pro	Trp	Pro	Tyr
			195				200					205			
Leu	Phe	Val	Arg	Arg	Arg	Thr	Asp	Val	Pro	Cys	Pro	Ala	Ala	Ser	Gln
			210				215					220			
Gly	Gly	Cys	Ala	Pro	Ser	Ser	Trp	Arg	Ala	Leu	Ala	Gln	Val	Thr	Gly
			225			230				235				240	
Cys	Ser	Leu	Gly	Pro	Leu	Gly	Leu	Ala	Gln	His	Ala	Gln	Ala	Ser	Val
			245					250					255		
Leu	Leu	Leu	Cys	Tyr	Lys	Trp	Ser	His	Ile	Gly	Glu	Thr	Ser	Ser	His
			260				265						270		
Leu	Arg	Ser	Lys	Val	Tyr	Ala	Ala	Phe	Gly	Gly	Ser	Ser	Pro	Cys	Leu
			275				280					285			
Lys	Gly	Leu	Met	Ser	Leu	Trp	Ala	Ser	Trp	Leu	Ser	Arg	Gly	Arg	Pro
			290				295					300			

<210> 836

$\langle 211 \rangle$  24

<212> 2128

<213> Artificial Sequence

0202

<223> PCR DE 1992

<400> 936

cgaagtoacg tggaggccag cctc

24

&lt;210&gt; 837

&lt;211&gt; 29

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 837

octgaacgaa ttcaataact ggctggac

29

&lt;210&gt; 838

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; VARIANT

&lt;222&gt; (1)...(166)

&lt;223&gt; Xaa = Any Amino Acid

&lt;400&gt; 838

Met	Gly	His	His	His	His	His	His	Val	Glu	Ala	Ser	Leu	Ser	Val	Arg
1			5					10						15	
His	Pro	Gln	Tyr	Asn	Arg	Pro	Leu	Leu	Ala	Asn	Asp	Leu	Met	Leu	Ile
		20					25						30		
Lys	Leu	Asp	Glu	Ser	Val	Ser	Glu	Ser	Asp	Thr	Ile	Arg	Ser	Ile	Ser
		35					40					45			
Ile	Ala	Ser	Gln	Cys	Pro	Thr	Ala	Gly	Asn	Ser	Cys	Leu	Val	Ser	Gly
		50				55					60				
Trp	Gly	Leu	Leu	Ala	Asn	Gly	Arg	Met	Pro	Thr	Val	Leu	Gln	Cys	Val
		65			70				75					80	
Asn	Val	Ser	Val	Val	Ser	Glu	Glu	Val	Cys	Ser	Lys	Leu	Tyr	Asp	Pro
			85						90				95		
Leu	Tyr	His	Pro	Ser	Met	Phe	Cys	Ala	Gly	Gly	Gln	Xaa	Gln	Xaa	
			100					105					110		
Asp	Ser	Cys	Asn	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Ile	Cys	Asn	Gly	Tyr
			115				120					125			
Leu	Gln	Gly	Leu	Val	Ser	Phe	Gly	Lys	Ala	Pro	Cys	Gly	Gln	Val	Gly
			130			135				140					
Val	Pro	Gly	Val	Tyr	Thr	Asn	Leu	Cys	Lys	Phe	Thr	Glu	Trp	Ile	Glu
			145			150			155						160
Lys	Thr	Val	Gln	Ala	Ser										
					165										

&lt;210&gt; 839

&lt;211&gt; 564

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (1)...(564)

&lt;223&gt; n = A,T,C or G

312

```

<400> 839
atggggccatc atcctcatca tcaagtgagag gcaagcctct ccgtaaggga cccagagtac   60
aacagaccct tgcctgctaa cgaacctatg ctcatcaagt tggacgaatc cgtgtccgag   120
ctcgacacca tccggagcat cagcatgtct tgcagtgcc ctaccgcggg gaactcttgc   180
ctcgtttctg gctgggtctc gctgggaac ggcagaatgc ctaccgtgct gcagtcgtgc   240
aacgtgtcgg tgggtgtctga ggaagtctgc agtaagctct atgaccgcgt gtacccaccc   300
agcatgttct ggcgcggcgg agggcassac cagaagaact cctgcacagg tgactctggg   360
gggcacctga tctgaacagg gtacttgcag ggccttgtgt ctttcggaaa agccccgtgt   420
ggcaagttg cgtgccaagg tctctacacc aacctctgca aatttactga gtggtatagag   480
aaacccgtcc aggcacgtta atga                                     564

```

```

<210> 840
<211> 21
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> PCR primer

```

```

<400> 840
ctcagggttc cggagccggc g                                     21

```

```

<210> 841
<211> 35
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> PCR primer

```

```

<400> 841
ctatagaatt cattaccaas aagctgggct ccagc                                     35

```

```

<210> 842
<211> 241
<212> PRT
<213> Homo sapiens

```

```

<400> 842
Met Gln His His His His His Leu Arg Val Pro Glu Pro Arg Pro
1      5      10      15
Gly Gln Ala Lys Ala Glu Gly Ala Ala Pro Pro Thr Pro Ser Lys Pro
20      25      30
Leu Thr Ser Phe Leu Ile Gln Asp Ile Leu Arg Asp Gly Ala Gln Arg
35      40      45
Gln Gly Gly Arg Thr Ser Ser Gln Arg Gln Arg Asp Pro Glu Pro Glu
50      55      60
Pro Glu Pro Glu Pro Glu Gly Gly Arg Ser Arg Ala Gly Ala Gln Asn
65      70      75      80
Asp Gln Leu Ser Thr Gly Pro Arg Ala Ala Pro Glu Glu Ala Glu Thr
85      90      95
Leu Ala Glu Thr Glu Pro Glu Arg His Leu Gly Ser Tyr Leu Leu Asp
100      105      110
Ser Glu Asn Thr Ser Gly Ala Leu Pro Arg Leu Pro Gln Thr Pro Lys
115      120      125

```



313

Gln	Pro	Gln	Lys	Arg	Ser	Arg	Ala	Ala	Phe	Ser	His	Thr	Gln	Val	Ile
130						135					140				
Glu	Leu	Gln	Arg	Lys	Phe	Ser	His	Gln	Lys	Tyr	Leu	Ser	Ala	Pro	Glu
145				150						155					160
Arg	Ala	His	Leu	Ala	Lys	Asn	Leu	Lys	Leu	Thr	Gln	Thr	Gln	Val	Lys
				165						170					175
Ile	Trp	Phe	Gln	Asn	Arg	Arg	Tyr	Lys	Thr	Lys	Arg	Lys	Gln	Leu	Ser
				180						185				190	
Ser	Glu	Leu	Gly	Asp	Leu	Glu	Lys	His	Ser	Ser	Leu	Pro	Ala	Leu	Lys
				195			200					205			
Glu	Glu	Ala	Phe	Ser	Arg	Ala	Ser	Leu	Val	Ser	Val	Tyr	Asn	Ser	Tyr
				210			215				220				
Pro	Tyr	Tyr	Pro	Tyr	Leu	Tyr	Cys	Val	Gly	Ser	Trp	Ser	Pro	Ala	Phe
225					230					235					240
Trp															

&lt;210&gt; 843

&lt;211&gt; 729

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 843

atgcagcctc	accacccatca	ccacctcagg	gttcaggagc	cggggcccgg	ggaggcgaaa	60
gcggaggggg	ccggcgccgc	gcacccgtcc	aagccgctca	cgctctctcc	cctccaggag	120
atctctgggg	acggcgccgc	ggggcaggcc	ggccgcacga	gcagccagag	acagcgcgac	180
ccggagccgg	agccagcgcc	agagccagag	ggaggacgca	gcagccggcg	ggcgagagac	240
gaccagctga	gcacggggcc	ccggcgccgc	ccggtatgag	ccgagcgcct	ggcgagagcc	300
yagccagaaa	ggcacttggg	gtcttatctg	tggagctctg	aaaacacttc	agggcgccctt	360
ccagcgcttc	cccaaacccc	taagcagcag	cagagcgctt	cccgagctgc	ctctctccac	420
actcagctga	tccagttgga	yaggaagtto	agccatcaga	aglacctgtc	ggccccctgaa	480
cgggccccacc	tggcacagaa	cctcaagctc	acggagaccc	aagtgaagat	atgggtccag	540
aacagcgctt	ataagacaaa	gggaagcag	ctctccctgg	agctgggaga	cttgagagag	600
cactctcttt	tgccggccct	gaagaggag	gcctctccac	gggctccct	ggtctccgtg	660
tataacagct	ctcttacta	cccatccctg	cactgctggg	gcagctggag	ccagctcttt	720
tggtaatga						729

&lt;210&gt; 844

&lt;211&gt; 27

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 844

ctactaagcg	ctggagtgag	ggatcag	27
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&lt;210&gt; 845

&lt;211&gt; 33

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

314

<490> 845  
catcgagat tcaactactct ctgactagat gtc

33

<210> 846  
<211> 161  
<212> PRT  
<213> Homo sapiens

<400> 846  
Met Gln His His His His His Ala Gly Val Arg Asp Gln Gly Gln  
1 5 10 15  
Gly Ala Arg Trp Pro His Thr Gly Lys Arg Gly Pro Leu Leu Gln Gly  
20 25 30  
Leu Thr Trp Ala Thr Gly Gly His Cys Phe Ser Ser Gln Ser Gly  
35 40 45  
Ala Val Asp Gly Ala Gly Gln Lys Lys Asp Arg Ala Trp Leu Arg Cys  
50 55 60  
Pro Gln Ala Val Ala Gly Phe Pro Leu Gly Ser Asp Cys Arg Gln Gly  
65 70 75  
Gly Arg Gln Gly Cys Gly Gly Ser Asp Asp Gln Asp Asp Leu Gly Val  
80 85 90 95  
Ala Pro Gly Leu Ala Pro Ala Trp Ala Leu Thr Gln Pro Pro Ser Gln  
100 105 110  
Ser Pro Gly Pro Gln Ser Leu Pro Ser Thr Pro Ser Ser Ile Trp Pro  
115 120  
Gln Trp Val Ile Leu Ile Thr Gln Leu Thr Ile Pro Ser Pro Ala His  
125 130 135 140  
Gly Pro Pro Trp Leu Pro Asn Ala Leu Gln Arg Gly His Leu Val Arg  
145 150 155 160  
Gln

<210> 847  
<211> 489  
<212> DNA  
<213> Homo sapiens

<400> 847  
atcgagcatc accaccatca ccacgctgga gtgagggtac aggggcaggg cgcagatggt 60  
ccaccacacag ggaagagagg gccctctctg cagggcctca cctgggccac aggaggacac 120  
tgcttttctc ctgaggagtc aggagctgtg gatgtgtgtg gacagaagaa ggacaggggc 180  
tggctcaggt gtccagaggc tctcgtctgc ttcccttgg gacagactg caggagagga 240  
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<400> 848  
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315

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Gly Gly Gly Ser Pro Thr Val His Ile Gly Pro Thr Ala Phe Leu Gly	35	40	45
Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val Gln Arg Val	50	55	60
Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr Gly Asp Val	65	70	75
Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr Ala Met Ala	80	85	90
Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser Val Asn Trp	95	100	105
Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr Leu Ala Glu	110	115	120
Gly Pro Pro Ala	125		
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<220>  
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&lt;210&gt; 852

&lt;211&gt; 400

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 852

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 35 40 45  
 Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val  
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 Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr  
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 Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr  
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 Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser  
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 Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr  
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 Leu Leu Glu Val Gly Val Glu Glu Lys Phe Met Thr Met Val Leu Gly  
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 Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro Leu Leu Gly Ser Ala  
 165 170 175  
 Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg Pro Phe Ile Trp  
 180 185 190  
 Ala Leu Ser Leu Gly Ile Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala  
 195 200 205  
 Gly Trp Leu Ala Gly Leu Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu  
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 Ala Leu Leu Ile Leu Gly Val Gly Leu Leu Asp Phe Cys Gly Gln Val  
 225 230 235 240  
 Cys Phe Thr Pro Leu Gln Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro  
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 Asp His Cys Arg Gln Ala Tyr Ser Val Tyr Ala Phe Met Ile Ser Leu  
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 305 310 315 320

317

Glu Glu Ala Ala Leu Gly Pro Thr Glu Pro Ala Glu Gly Leu Ser Ala  
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 Arg Asn Leu Gly Ala Leu Leu Pro Arg Leu His Glu Leu Cys Cys Arg  
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&lt;210&gt; 853

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 853

Leu Leu Pro Pro Pro Pro Ala Leu Cys Gly Ala Ser Ala Cys Asp Val  
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 Ser Val Arg Val  
   20

&lt;210&gt; 854

&lt;211&gt; 60

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 854

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&lt;210&gt; 855

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 855

Ala Ser Ala Cys Asp Val Ser Val Arg Val  
   5  10

&lt;210&gt; 856

&lt;211&gt; 30

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 856

gctctgtcct gtgatgtctc cgtacgtgtg

30

&lt;210&gt; 857

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 857

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   1  5

&lt;210&gt; 858

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1 5

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320

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<213> Homo sapiens

<400> 875

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<210> 876

<211> 9

<212> PRT

<213> Homo sapiens

<400> 876

Gly Val Leu Val His Pro Gln Trp Val  
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<210> 877

<211> 9

<212> PRT

<213> Homo sapiens

<400> 877

Val Leu Val His Pro Gln Trp Val Leu  
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<210> 878

<211> 1195

<212> DNA

<213> Homo sapiens

<400> 878

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<211> 339

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<213> Homo sapiens

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 Arg Lys Gln Phe Gly Leu Leu Ser Phe Phe Ala Val Leu His Ala  
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 180 185 190  
 Leu Asn Trp Ala Tyr Gln Gln Val Gln Gln Asn Lys Glu Asp Ala Trp  
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 Ser Gln Leu

&lt;210&gt; 880

&lt;211&gt; 2172

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 885

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&lt;210&gt; 881

&lt;211&gt; 2455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 881

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324

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```

&lt;210&gt; 882

&lt;211&gt; 2453

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 882

```

cagcttaaaaa atgtgtttctt gaaatcagtg attagcatte actcaccagt acccctaacta 60
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```

325

```

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```

&lt;210&gt; 883

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 883

```

Met Thr His Ser Ser Ala Trp Leu Glu Arg Pro Gln Glu Thr Tyr Asn
      5              10              15
His Gly Gly Arg Arg Arg Gly Ser Lys Ala Arg Leu Thr Trp Trp Gln
      20              25              30
Glu Arg Thr Ser Glu Gly Gly Asp Cys His Lys Leu Phe Phe Phe Glu
      35              40              45
Thr Arg Val Trp Pro Cys Cys Pro Gly Trp Ser Ala Val Ala
      50              55              60

```

&lt;210&gt; 884

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 884

```

Met Val Glu Gly Glu Gly Glu Ala Arg His Val Leu His Gly Gly Arg
      5              10              15
Arg Glu Arg Val Arg Gly Glu Thr Ala Thr Asn Phe Phe Phe Leu Arg
      20              25              30
Gln Glu Ser Gly Pro Val Ala Gln Ala Gly Val Gln Trp His Asp Leu
      35              40              45
Ser Ser Leu Gln Pro Leu Pro His Arg Phe Lys Gln Phe Ser Cys Leu
      50              55              60
Ser Leu Pro His Ser Trp Asp His Arg Tyr Ala Pro Pro His Leu Ala
      65              70              75              80
Asn Phe Cys Ser Phe Ser Arg Asp Gly Val Ser Leu Cys Cys Ser Gly
      85              90              95              100
Trp Ser Lys Thr Pro Gly Leu Gln Gln Ser Ala Cys Leu Gly Leu Pro
      100              105              110
Lys Cys Trp Gly Tyr Arg His Lys Pro Pro His Pro Ala Cys His Ile
      115              120              125
Leu Leu Asn Tyr Glu Val Ser
      130              135

```

&lt;210&gt; 885

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 885

```

Met His Tyr His Lys Asn Ser Met Gly Lys Ile Pro Pro Ile Ile Gln

```

326

5					10					15					
Ser	Pro	Pro	Thr	Arg	Ser	Pro	Pro	Thr	Arg	Gly	Ile	Gly	Trp	Gly	His
20					25					30					
Arg	Ala	Lys	Pro	Tyr	Gln	Met	Leu	Gln	Gly	Leu	Gly	Thr	Leu	Arg	Pro
35					40					45					
Leu	Arg	Pro	Gly	Val	Ser	Val	Thr	Leu	Leu	Gly	Ser	Val	Cys	Leu	Gln
50					55					60					
Asp	Leu	Pro	Pro	Leu	Pro	Trp	Tyr	Arg	Arg	Lys	Val	Leu			
65					70					75					

&lt;210&gt; 336

<211> 60

&lt;212&gt; PRT

<213> Homo sapiens

&lt;480&gt; 336

Met	Leu	Val	His	Asp	5	Tyr	Ser	Cys	Cys	Gly	Met	Val	Tyr	Arg	Phe	Gly
										10					15	
Gln	Met	Ser	Asp	Asn	20	Pro	Phe	Tyr	Ile	Leu	Ala	Ser	Leu	Gly	Ser	Ser
									25					30		
Ser	Cys	Arg	Asn	Gly	35	Leu	Ala	Ser	Lys	Trp	Arg	Gln	Ala	Asp	Pro	Ser
							40							45		
Asp	Gly	Tyr	Met	Glu	50	Pro	Cys	Phe	Gln	Leu	Leu	Phe		55		
							55					60				

4210 887

2214 36

&lt;212&gt; PRT

<213> Homo sapiens

<400> 887

Met	Cys	Leu	Cys	5	Pro	Leu	Gly	Gly	10	Gln	Glu	Leu	Cys	His	Cys	15
Met	Ser	Thr	Ser	20	Gly	Phe	Ala	Pro	25	Pro	Gln	Leu	Gly	Ser	Arg	30
Cys	Ser	His	Ile	35	Gly	Pro	Ile	Lys	40	Ile	Ala	Arg	Asn	Lys	Phe	45
Arg	Thr	Leu	Thr	50	Gln	Glu	Leu	Arg	55	Arg	Phe	Ala	Gln	Tyr	Ser	60
Met	Met	Phe	Gly	65	Asp	Gln	Thr	Thr	70	Ala	Gly	Gln	Lys			75

&lt;210&gt; 888

<211> 76

&lt;212&gt; FRT

<213> Homo sapiens

4003 888

Met	Val	Lys	Ser	Arg	Phe	Thr	Lys	Asn	Thr	Lys	Ile	Thr	Gln	Ala	Trp
				5				10					15		
Trp	Arg	Ala	Pro	Val	Ile	Pro	Gly	Thr	Arg	Glu	Ala	Glu	Gly	Gly	Glu
			20					25					30		
Ser	Leu	Glu	Pro	Gly	Arg	Leu	Arg	Glu	Gln	Asn	Arg	Leu	Asn	Pro	Gly
			35				40					45			
Gly	Arg	Gly	Cys	Ser	Gln	Pro	Arg	Ser	Cys	Cys	Cys	Thr	Pro	Ala	Trp
		50				55					60				
Ser	Thr	Gln	Gln	Asp	Ser	Ala	Ser	Lys	Thr	Asn	Lys				
				75						75					

327

<210> 889  
 <211> 80  
 <212> PRT  
 <213> Homo sapiens

<400> 889  
 Met Leu Leu His Ser Ser Leu Val Asn Arg Ala Arg Leu Cys Leu Lys  
                   5                  10                  15  
 Asn Lys Gln Ile Asn Lys Gln Thr Asn Lys Thr Glu Arg Phe Cys Cys  
                   20                  25                  30  
 Asn Val Gln Gly Ala Ile Cys Ser Phe Lys Lys Ile Ile Phe Gly Gln  
                   35                  40                  45  
 Ala Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp Glu Ala Lys Val  
                   50                  55                  60  
 Gly Gly Ser Phe Glu Val Arg Ser Leu Arg Ser Ala Trp Pro Thr Trp  
                   65                  70                  75                  80

<210> 890  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 890  
 Met His Tyr His Lys Asn Ser Met Gly Lys Ile Pro Pro His Asn Pro  
                   5                  10                  15  
 Ile Thr Ser His Gln Val Ser Ser Asp Thr Trp Asp Trp Val Gly Thr  
                   20                  25                  30  
 Gln Ser Gln Thr Val Ser Asp Ala Ala Gly Ala Gly Asp Thr Glu Thr  
                   35                  40                  45  
 Thr Gln Thr Trp Cys Leu Cys His Ser Ser Gly Leu Cys Leu Ser Pro  
                   50                  55                  60  
 Gly Pro Pro Ser Pro Ser Met Val  
                   65                  70

<210> 891  
 <211> 77  
 <212> PRT  
 <213> Homo sapiens

<400> 891  
 Met His Tyr His Lys Asn Ser Met Gly Lys Ile Pro Pro Ile Ile Gln  
                   5                  10                  15  
 Ser Pro Pro Thr Arg Ser Pro Pro Thr Arg Gly Ile Gly Trp Gly His  
                   20                  25                  30  
 Arg Ala Lys Pro Tyr Gln Met Leu Gln Gly Leu Gly Thr Leu Arg Pro  
                   35                  40                  45  
 Leu Arg Pro Gly Val Ser Val Thr Leu Leu Gly Ser Val Cys Leu Gln  
                   50                  55                  60  
 Asp Leu Pro Pro Leu Pro Trp Tyr Arg Arg Lys Val Leu  
                   65                  70                  75

<210> 892  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 892





```

ogttttccaa gaaaacaaag gggtgtggtt tgcttccocg tgcattgatt acctcttagag 1626
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tgccataactg tgcagggtcgc agtgggtccc ctgcccagcc tggctctccc aaccccttgt 1740
ccgcaagggg tgatggccgg ctgggtttgg gcaatggcgg tcaattgtgg aaggagaggg 1800
gttggagggt gcccccattg agatcttccg gatgagtcct ttccaggggc caattttgga 1860
tgagcatgga gctgtccatt ctccagctgc tggatgactt agatgaasaa gtagagacat 1920
ggaaaggagg acagccaggt ggcacctgca ccggctgccc tctggggcca ctgtgtagt 1980
tcocacagct acttcacaag gggattttgc tgatgggttc ttgagacott agccagccctg 2040
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atgctcagtt taaggctaac tttttccatg ttatgtttct accattgat ggtggtgacc 2460
ctgagttcaa agccattct 2479

```

&lt;210&gt; 895

&lt;211&gt; 492

&lt;212&gt; FRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 895

```

Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu
      5              10              15
Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val
      20              25              30
Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro
      35              40              45
Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val
      50              55              60
Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys
      65              70              75
Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val
      80              85              90
Gly Ala Ala Leu Ala Ala Gly Leu Leu Tyr Lys Phe Met Gly Ser Lys
      95              100             105
Cys Ser Asn Ser Gly Ile Gln Cys Asp Ser Ser Gly Thr Cys Ile Asn
      110             115             120
Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp
      125             130             135
Glu Asn Arg Cys Val Arg Leu Tyr Gly Pro Asn Phe Ile Leu Gln Met
      140             145             150
Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp
      155             160             165
Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn
      170             175             180
Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser
      185             190             195
Phe Met Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys
      200             205             210
Leu Tyr His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg
      215             220             225
Cys Leu Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile
      230             235             240
Val Gly Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser
      245             250             255
Leu His Val Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro
      260             265             270

```

275	280	285
Glu Trp Ile Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn		
290	295	300
Pro Trp His Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met		
305	310	315
Phe Tyr Gly Ala Gly Tyr Gln Val Gln Lys Val Ile Ser His Pro Asn		
320	325	330
Tyr Asp Ser Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln		
335	340	345
Lys Pro Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn		
350	355	360
Pro Gly Met Met Leu Gln Pro Gln Gln Leu Cys Trp Ile Ser Gly Trp		
365	370	375
Gly Ala Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala		
380	385	390
Lys Val Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr		
395	400	405
Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly		
410	415	420
Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser		
425	430	435
Asn Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly		
440	445	450
Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe		
455	460	465
Thr Asp Trp Ile Tyr Arg Gln Met Lys Ala Asn Gly		
470	475	480
	485	490

&lt;210&gt; 896

&lt;211&gt; 683

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;490&gt; 896

gtcatattga acattccaga taccatcat tactcgatgc tgttgataac agcaagatgg 60  
 ctttgaaactc agggtcaccca ccagctattg gaacctacta tgaanaaccat ggatacccaac 120  
 cggaaacccc ctatcccgca cagcccaactg tggccccac tgtctacgag gtgcataccg 180  
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 aaaaagcaact gtgcataccc ttgacccctgg ggaccttact cgtgggagct gcgctggcgc 360  
 ctgctact ctggaagtcc atgggcagca agtctccaa ctcgggata gactggagct 420  
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 catctcagag gaagtcctgg cccctgtgt gccagacga ctggaacga aactacgggc 600  
 gggcggcctg cagggacatg ggcataaga ataatttta ccttagccaa ggaatagtg 660  
 atgacaggg atccaccagc ttt 683

&lt;210&gt; 897

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 897

Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu  
 1 5 10 15

331

```

Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val
    20                      25          30
Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro
    35                      40          45
Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val
    50                      55          60
Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys
    65                      70          75          80
Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val
    85                      90          95
Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys
    100                     105          110
Cys Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn
    115                     120          125
Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp
    130                     135          140
Glu Asn Arg Cys Val Arg Leu Tyr Gly Pro Asn Phe Ile Leu Gln Met
    145                     150          155          160
Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp
    165                     170          175
Asn Gln Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn
    180                     185          190
Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser
    195                     200          205
Phe

```

&lt;210&gt; 898

&lt;211&gt; 27

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 898

```

Val Gly Gln Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly Thr
  1                      5          10          15
Glu Ala Arg Arg His Tyr Asp Glu Gly Val Arg
    20                      25

```

&lt;210&gt; 899

&lt;211&gt; 35

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 899

ggatccggcg ccacacatgtc acttctctagc ctgct

35

&lt;210&gt; 900

&lt;211&gt; 27

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 900

gtcgactcag ctggaccaca gccgcag

27

&lt;210&gt; 901

&lt;211&gt; 34

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;221&gt; PCR primer

&lt;400&gt; 901

ggatccgccc gccaccatggg ctgcaggetg ctct

34

&lt;210&gt; 902

&lt;211&gt; 27

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;221&gt; PCR primer

&lt;400&gt; 902

gtcgactcag aaatctcttc tcttgac

27

&lt;210&gt; 993

&lt;211&gt; 936

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (1)...()

&lt;223&gt; n = A, T, C or G

&lt;400&gt; 903

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 aaatgtgaac aacatctctggg tcataacgct atgtaltggg acacgcaaaag tgctaagaag 180  
 ccaactggagc tcactgtttgt ctacagtcctt gaagaacggg ttgaaaaaa caagtgtgcca 240  
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 gtgaatggga aggaggtgca cagtggggtc agcacagacc cgcagccctc caaggagcag 600  
 cccgcctcca atgacctcag atactgcctg agcagccgac tgaggggtctc ggccacottc 660  
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 atcctctatg agatcttctt agggaaaggcc accttctatg ccgtgtgtgt cagtgcctcc 900  
 gtgctgatgg ccatggtcaa gagaagggat ttctga 936

&lt;210&gt; 994

&lt;211&gt; 834

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<220>  
 <221> misc\_feature  
 <222> {1}...{1}  
 <223> n = A, T, C or G

<400> 904  
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 ctggactgca catatgacac cagtatcaaa agttatggtc tcttctgtga caagcagccc 180  
 agcagtgctgg aaatgatctt tcttctttat caggggtctt atgacagaga aaatgcacaa 240  
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 gcttcccaac tgggggactc agcaatgtat tctctgtcaa tgaagagagg ccggggagga 360  
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 gacaccttat tcocagccc agaaagtcc tgtgatgtca agctgtgtga gaaaagcttt 720  
 gaacagata cgaactaaa cttcacaac ctgtcagtga ttgggttccc aatcctctc 780  
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<210> 905  
 <211> 311  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> variant  
 <222> (1)...(311)  
 <223> Xaa = Any amino acid

<400> 905  
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 20 25 30  
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 35 40 45  
 Asn Ala Met Tyr Trp Tyr Lys Gln Ser Ala Lys Lys Pro Leu Glu Leu  
 50 55 60  
 Met Phe Val Tyr Ser Leu Glu Glu Arg Val Glu Asn Asn Ser Val Pro  
 65 70 75 80  
 Ser Arg Phe Ser Glu Cys Pro Asn Ser Ser His Leu Phe Leu His  
 85 90 95  
 Leu His Thr Leu Gln Pro Glu Asp Ser Ala Leu Tyr Leu Cys Ala Ser  
 100 105 110  
 Ser Gln Asp Arg Thr Ser Ser Ser Tyr Glu Gln Tyr Phe Gly Pro Gly  
 115 120 125  
 Thr Arg Leu Thr Val Thr Glu Asp Leu Lys Asn Val Phe Pro Pro Glu  
 130 135 140  
 Val Ala Val Phe Glu Pro Ser Glu Ala Glu Ile Ser His Thr Gln Lys  
 145 150 155 160  
 Ala Thr Leu Val Cys Leu Ala Thr Gly Phe Tyr Pro Asp His Val Glu  
 165 170 175  
 Leu Ser Trp Trp Val Asn Gly Lys Glu Val His Ser Gly Val Ser Thr  
 180 185 190  
 Asp Pro Gln Pro Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr  
 195 200 205

Cys Leu Ser Ser Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asn Pro  
 210 215 220  
 Arg Asn His Phe Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn  
 225 230 235 240  
 Asp Glu Trp Thr Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser  
 245 250 255  
 Ala Glu Ala Trp Gly Arg Ala Asp Cys Gly Phe Thr Ser Glu Ser Tyr  
 260 265 270  
 Gln Gln Gly Val Leu Ser Ala Thr Ile Leu Tyr Glu Ile Leu Leu Gly  
 275 280 285  
 Lys Ala Thr Leu Tyr Ala Val Leu Val Ser Ala Leu Val Leu Met Ala  
 290 295 300  
 Met Val Lys Arg Lys Asp Phe  
 305 310

&lt;210&gt; 906

&lt;211&gt; 277

&lt;212&gt; PR2

&lt;213&gt; Homo sapiens

&lt;406&gt; 906

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 Gly Pro Gly Ile Ala Gln Lys Ile Thr Gln Thr Gln Pro Gly Met Phe  
 20 25 30  
 Val Gln Glu Lys Glu Ala Val Thr Leu Asp Cys Thr Tyr Asp Thr Ser  
 35 40 45  
 Asp Gln Ser Tyr Gly Leu Phe Trp Tyr Lys Gln Pro Ser Ser Gly Gln  
 50 55 60  
 Met Ile Phe Leu Ile Tyr Gln Gly Ser Tyr Asp Glu Gln Asn Ala Thr  
 65 70 75 80  
 Glu Gly Arg Tyr Ser Leu Asn Phe Gln Lys Ala Arg Lys Ser Ala Asn  
 85 90 95  
 Leu Val Ile Ser Ala Ser Gln Leu Gly Asp Ser Ala Met Tyr Phe Cys  
 100 105 110  
 Ala Met Arg Glu Gly Ala Gly Gly Asn Lys Leu Thr Phe Gly Thr  
 115 120 125  
 Gly Thr Gln Leu Lys Val Glu Leu Asn Ile Gln Asn Pro Asp Pro Ala  
 130 135 140  
 Val Tyr Gln Leu Arg Asp Ser Lys Ser Ser Asp Lys Ser Val Cys Leu  
 145 150 155 160  
 Phe Thr Asp Phe Asp Ser Gln Thr Asn Val Ser Gln Ser Lys Asp Ser  
 165 170 175  
 Asp Val Tyr Ile Thr Asp Lys Thr Val Leu Asp Met Arg Ser Met Asp  
 180 185 190  
 Phe Lys Ser Asn Ser Ala Val Ala Trp Ser Asn Lys Ser Asp Phe Ala  
 195 200 205  
 Cys Ala Asn Ala Phe Asn Asn Ser Ile Ile Pro Glu Asp Thr Phe Phe  
 210 215 220  
 Pro Ser Pro Glu Ser Ser Cys Asp Val Lys Leu Val Glu Lys Ser Phe  
 225 230 235 240  
 Gln Thr Asp Thr Asn Leu Asn Phe Gln Asn Leu Ser Val Ile Gly Phe  
 245 250 255  
 Arg Ile Leu Leu Leu Lys Val Ala Gly Phe Asn Leu Leu Met Thr Leu  
 260 265 270  
 Arg Leu Trp Ser Ser  
 275

<210> 907  
 <211> 1536  
 <212> DNA  
 <213> Homo sapiens

<400> 907  
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 ctgaggagcty ggaatatcag atctga 1536

<210> 908  
 <211> 1533  
 <212> DNA  
 <213> Homo sapiens

<400> 908  
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 gagctgggtga gctcaagtg gaagcgggtac gggcggcgct acttctgcac gctgggtgac 360  
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 atgggtgctgg tgacctggtt gatgcggctc atcagtgcca gggggagggt ggttaacctg 720  
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 ctggagagacg gggagagctg ggaatatcag atc 1533

&lt;210&gt; 959

&lt;211&gt; 511

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 909

Met Tyr Asn Leu Leu Leu Ser Tyr Asp Arg His Gly Asp His Leu Gln  
 5 10 15  
 Pro Leu Asp Leu Val Pro Asn His Gln Gly Leu Thr Pro Phe Lys Leu  
 20 25 30  
 Ala Gly Val Glu Gly Asn Thr Val Met Phe Gln His Leu Met Gln Lys  
 35 40 45  
 Arg Lys His Thr Gln Trp Thr Tyr Gly Pro Leu Thr Ser Thr Leu Tyr  
 50 55 60  
 Asp Leu Thr Glu Ile Asp Ser Ser Gly Asp Glu Gln Ser Leu Leu Glu  
 65 70 75 80  
 Leu Ile Ile Thr Thr Lys Lys Arg Glu Ala Arg Gln Ile Leu Asp Gln  
 85 90 95  
 Thr Pro Val Lys Glu Leu Val Ser Leu Lys Trp Lys Arg Tyr Gly Arg  
 100 105 110  
 Pro Tyr Phe Cys Met Leu Gly Ala Ile Tyr Leu Leu Tyr Ile Ile Cys  
 115 120 125  
 Phe Thr Met Cys Cys Ile Tyr Arg Pro Leu Lys Pro Arg Thr Asn Asn  
 130 135 140  
 Arg Thr Ser Pro Arg Asp Asn Thr Leu Leu Gln Gln Lys Leu Leu Gln  
 145 150 155 160  
 Glu Ala Tyr Met Thr Pro Lys Asp Asp Ile Arg Leu Val Gly Glu Leu  
 165 170 175  
 Val Thr Val Ile Gly Ala Ile Ile Ile Leu Leu Val Glu Val Pro Asp  
 180 185 190  
 Ile Phe Arg Met Gly Val Thr Arg Phe Phe Gly Gln Thr Ile Leu Gly  
 195 200 205  
 Gly Pro Phe His Val Leu Ile Ile Thr Tyr Ala Phe Met Val Leu Val  
 210 215 220  
 Thr Met Val Met Arg Leu Ile Ser Ala Ser Gly Glu Val Val Pro Met  
 225 230 235 240  
 Ser Phe Ala Leu Val Leu Gly Trp Cys Asn Val Met Tyr Phe Ala Arg  
 245 250 255  
 Gly Phe Gln Met Leu Gly Pro Phe Thr Ile Met Ile Gln Lys Met Ile  
 260 265 270  
 Phe Gly Asp Leu Met Arg Phe Cys Trp Leu Met Ala Val Val Ile Leu  
 275 280 285  
 Gly Phe Ala Ser Ala Phe Tyr Ile Ile Phe Gln Thr Glu Asp Pro Glu  
 290 295 300  
 Glu Leu Gly His Phe Tyr Asp Tyr Pro Met Ala Leu Phe Ser Thr Phe  
 305 310 315 320  
 Glu Leu Phe Leu Thr Ile Ile Asp Gly Pro Ala Asn Tyr Asn Val Asp  
 325 330 335  
 Leu Pro Phe Met Tyr Ser Ile Thr Tyr Ala Ala Phe Ala Ile Ile Ala



340	345	350
Thr Leu Leu Met Leu Asn Leu Leu Ile Ala Met Met Gly Asp Thr His		
355	360	365
Trp Arg Val Ala His Glu Arg Asp Glu Leu Trp Arg Ala Gln Ile Val		
370	375	380
Ala Thr Thr Val Met Leu Glu Arg Lys Leu Pro Arg Cys Leu Trp Pro		
385	390	395
Arg Ser Gly Ile Cys Gly Arg Glu Tyr Gly Leu Gly Asp Arg Trp Phe		
400	405	410
Leu Arg Val Glu Asp Arg Gln Asp Leu Asn Arg Gln Arg Ile Gln Arg		
415	420	425
Tyr Ala Gln Ala Phe His Thr Arg Gly Ser Glu Asp Leu Asp Lys Asp		
430	435	440
Ser Val Glu Lys Leu Glu Leu Gly Cys Pro Phe Ser Pro His Leu Ser		
445	450	455
Leu Pro Met Pro Ser Val Ser Arg Ser Thr Ser Arg Ser Ser Ala Asn		
460	465	470
Trp Glu Arg Leu Arg Gln Gly Thr Leu Arg Arg Asp Leu Arg Gly Ile		
475	480	485
Ile Asn Arg Gly Leu Glu Asp Gly Glu Ser Trp Glu Tyr Gln Ile		
490	495	500
	505	510

<210> 910

<211> 134

<212> PRT

<213> Homo sapiens

<400> 910

Met Tyr Asn Leu Leu Leu Ser Tyr Asp Arg His Gly Asp His Leu Gln	
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Pro Leu Asp Leu Val Pro Asn His Gln Gly Leu Thr Pro Phe Lys Leu	
20	25
Ala Gly Val Glu Gly Asn Thr Val Met Phe Gln His Leu Met Gln Lys	
35	40
Arg Lys His Thr Gln Trp Thr Tyr Gly Pro Leu Thr Ser Thr Leu Tyr	
50	55
Asp Leu Thr Glu Ile Asp Ser Ser Gly Asp Glu Gln Ser Leu Leu Glu	
65	70
Leu Ile Ile Thr Thr Lys Lys Arg Glu Ala Arg Gln Ile Leu Asp Gln	
85	90
Thr Pro Val Lys Glu Leu Val Ser Leu Lys Trp Lys Arg Tyr Tyr Arg	
100	105
Pro Tyr Phe Cys Met Leu Gly Ala Ile Tyr Leu Leu Tyr Ile Ile Cys	
115	120
Phe Thr Met Cys Cys Ile	125
130	

<210> 911

<211> 55

<212> PRT

<213> Homo sapiens

<400> 911

Ala Tyr Arg Pro Leu Lys Pro Arg Thr Asn Asn Arg Thr Ser Pro Arg	
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Asp Asn Thr Leu Leu Gln Gln Lys Leu Leu Gln Glu Ala Tyr Met Thr	
20	25
Pro Lys Asp Asp Ile Arg Leu Val Gly Glu Leu Val Thr Val Ile Gly	
30	

338

35 49 43  
 Ala Ile Ile Ile Leu Leu Val  
 50 55

<210> 912  
 <211> 39  
 <212> PRT  
 <213> Homo sapiens

<400> 912  
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 Thr Ile Leu Gly Gly Pro Phe His Val Leu Ile Ile Thr Tyr Ala Phe  
 20 25 30  
 Met Val Leu Val Thr Met Val  
 35

<210> 913  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 913  
 Met Arg Leu Ile Ser Ala Ser Gly Glu Val Val Pro Met Ser Phe Ala  
 5 10 15  
 Leu Val Leu

<210> 914  
 <211> 52  
 <212> PRT  
 <213> Homo sapiens

<400> 914  
 Gly Trp Cys Asn Val Met Tyr Phe Ala Arg Gly Phe Gln Met Leu Gly  
 5 10 15  
 Pro Phe Thr Ile Met Ile Gln Lys Met Ile Phe Gly Asp Leu Met Arg  
 20 25 30  
 Phe Cys Trp Leu Met Ala Val Val Ile Leu Gly Phe Ala Ser Ala Phe  
 35 40 45  
 Tyr Ile Ile Phe  
 50

<210> 915  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens

<400> 915  
 Glu Thr Glu Asp Pro Glu Glu Leu Gly His Phe Tyr Asp Tyr Pro Met  
 5 10 15  
 Ala Leu Phe Ser Thr Phe Glu Leu Phe Leu Thr Ile Ile Asp Gly Pro  
 20 25 30  
 Ala Asn Tyr Asn Val Asp Leu Pro Phe Met Tyr Ser Ile Thr Tyr Ala  
 35 40 45  
 Ala Phe Ala Ile Ile Ala Thr Leu Leu Met Leu Asn Leu Leu Ile Ala  
 50 55 60  
 Met Met Gly Asp Thr His Trp Arg Val Ala His Glu Arg Asp Glu Leu

339

65	70	75	80
Trp Arg Ala Gln Ile Val Ala Thr Thr Val Met Leu Glu Arg Lys Leu			
	85	90	95
Pro Arg Cys Leu Trp Pro Arg Ser Gly Ile Cys Gly Arg Glu Tyr Gly			
	100	105	110
Leu Gly Asp Arg Trp Phe Leu Arg Val Glu Asp Arg Gln Asp Leu Asn			
	115	120	125
Arg Gln Arg Ile Gln Arg Tyr Ala Gln Ala Phe His Thr Arg Gly Ser			
	130	135	140
Glu Asp Leu Asp Lys Asp Ser Val Glu Lys Leu Glu Leu Gly Cys Pro			
	145	150	155
Phe Ser Pro His Leu Ser Leu Pro Met Pro Ser Val Ser Arg Ser Thr			
	160	165	170
Ser Arg Ser Ser Ala Asn Trp Glu Arg Leu Arg Gln Gly Thr Leu Arg			
	175	180	185
Arg Asp Leu Arg Gly Ile Ile Asn Arg Gly Leu Glu Asp Gly Glu Ser			
	190	195	200
Trp Glu Tyr Gln Ile			205
	210		

<210> 916  
 <211> 1302  
 <212> DNA  
 <213> Homo sapiens

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 acaactcaga tcttccaaat atgaaactgt ttggggaaac tcaatttttt caatatattt 1200  
 ttctcttttg ttttctgtct acataatatt attaatccac tgactagggt gtgtgtttgg 1260  
 ggttatttact ttctatttta ccatgcagtc caaatctaaa ct 1302

<210> 917  
 <211> 2061  
 <212> DNA  
 <213> Homo sapiens

<400> 917  
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&lt;210&gt; 918

&lt;211&gt; 957

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 918

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&lt;210&gt; 919

<211> 954  
 <212> DNA  
 <213> Homo sapiens

<400> 919  
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 tactgcttat acccaagatgt catgaagctg gccctgtgat atatccgggt caatgtgctc 600  
 tatggcctta tgcctcatct ctccgcctat ggcctggact cacttctcat ctccctctca 660  
 tatctgcctta tctttaagac tgtgttggtc ttgacacgtg aagccacagg caaggcattt 720  
 ggccttggtg tctctcatgt gtgtgctgtg tctctattct atgtaccttt catlygattg 780  
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<210> 920  
 <211> 310  
 <212> PRT  
 <213> Homo sapiens

<400> 920  
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 Leu Ile Gly Leu Pro Gly Leu Glu Glu Ala Gln Phe Trp Leu Ala Phe  
 20 25 30  
 Pro Leu Cys Ser Leu Tyr Leu Ile Ala Val Leu Gly Asn Leu Thr Ile  
 35 40 45  
 Ile Tyr Ile Val Arg Thr Glu His Ser Leu His Glu Pro Met Tyr Ile  
 50 55 60  
 Phe Leu Cys Met Leu Ser Gly Ile Asp Ile Leu Ile Ser Thr Ser Ser  
 65 70 75 80  
 Met Pro Lys Met Leu Ala Ile Phe Trp Phe Asn Ser Thr Thr Ile Gln  
 85 90 95  
 Phe Asp Ala Cys Leu Leu Gln Met Phe Ala Ile His Ser Leu Ser Gly  
 100 105 110  
 Met Glu Ser Thr Val Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala  
 115 120 125  
 Ile Cys His Pro Leu Arg His Ala Thr Val Leu Thr Leu Pro Arg Val  
 130 135 140  
 Thr Lys Ile Gly Val Ala Ala Val Val Arg Gly Ala Ala Leu Met Ala  
 145 150 155 160  
 Pro Leu Pro Val Phe Ile Lys Gln Leu Pro Phe Cys Arg Ser Asn Ile  
 165 170 175  
 Leu Ser His Ser Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys  
 180 185 190  
 Asp Asp Ile Arg Val Asn Val Val Tyr Gly Leu Ile Val Ile Ile Ser  
 195 200 205  
 Ala Ile Gly Leu Asp Ser Leu Leu Ile Ser Phe Ser Tyr Leu Leu Ile  
 210 215 220  
 Leu Lys Thr Val Leu Gly Leu Thr Arg Glu Ala Gln Ala Lys Ala Phe  
 225 230 235 240

342

Gly Thr Cys Val Ser His Val Cys Ala Val Phe Ile Phe Tyr Val Pro  
 243 250 255  
 Phe Ile Gly Leu Ser Met Val His Arg Phe Ser Lys Arg Arg Asp Ser  
 260 265 270  
 Pro Leu Pro Val Ile Leu Ala Asn Ile Tyr Leu Leu Val Pro Pro Val  
 275 285 285  
 Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Glu Ile Arg Gln Arg  
 290 295 300  
 Ile Leu Arg Leu Phe His Val Ala Thr His Ala Ser Glu Pro  
 305 310 315

&lt;210&gt; 921

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 921

Met Met Val Asp Pro Asn Gly Asn Glu Ser Ser Ala Thr Tyr Phe Ile  
 5 10 15  
 Leu Ile Gly Leu Pro Gly Leu Glu Glu Ala Gln Phe  
 20 25

&lt;210&gt; 922

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 922

Arg Thr Glu His Ser Leu His Glu Pro  
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&lt;210&gt; 923

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 923

Lys Met Leu Ala Ile Phe Trp Phe Asn Ser Thr Thr Ile Gln Phe Asp  
 5 10 15  
 Ala Cys Leu Leu Gln  
 20

&lt;210&gt; 924

&lt;211&gt; 29

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 924

Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg His Ala Thr Val Leu  
 5 10 15  
 Thr Leu Pro Arg  
 20

&lt;210&gt; 925

&lt;211&gt; 37

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

343

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<400> 925
Phe Ile Lys  Gln Leu Pro Phe Cys Arg Ser Asn Ile Leu Ser His Ser
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Tyr Cys Leu  His Gln Asp Val Met  Lys Leu Ala Cys Asp Asp  Ile Arg
              20              25              30
Val Asn Val  Val Tyr
              35

```

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<210> 926
<211> 13
<212> PRT
<213> Homo sapiens
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<408> 926  
Lys Thr Val Leu Gly Leu Thr Arg Glu Ala Gln Ala Lys  
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<210> 927
<211> 10
<212> PRT
<213> Homo sapiens
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<400> 927  
Val His Arg Phe Ser Lys Arg Arg Asp Ser  
5 10

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<210> 926
<211> 22
<212> PRT
<213> Homo sapiens
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<400> 928  
Lys Thr Lys Glu Ile Arg Gln Arg Ile Leu Arg Leu Phe His Val Ala  
                  5                  10                  15

Thr His Ala Ser Glu Pro  
20

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<210> 929
<211> 3245
<212> DNA
<213> Homo sapiens
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#490- 929						
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ctctgctgtctg	tgtgatcaacg	caagcttggct	tgtgaactcag	gtgtccaccac	agctatttggg	180
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ctctcccaact	tctatccaggt	gcactccacgc	cagctactaac	cgctcccccgt	gcacccagata	300
gcctccgagg	ctcttgagcya	ggctctccaac	ccgcctgtctg	gcgcgcagcgc	gaaatctccca	360
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tgtctccaact	ctggagctaga	tgtggacttc	tcgggtactct	gcatacaacc	ctctaacctgc	540
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caagcagctgc	ggaagcagga	ctatccggctc	gcgcgctcgca	ggggacatggt	ctataagaat	720
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tcaaaagcag tgggtttctt acgtctgtata gcttgcgggg tcaacttgaa ctcaagccgc 900
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saagctctga ctllcaacga cctagtgaaa ccagtggtgc tgcocaaacc aggcattgat 1260
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gcgcgc 3245

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&lt;210&gt; 930

&lt;211&gt; 1479

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 930

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tccaaacccc agctctgcac ccagcccaaaa tccccatccc ggaacgtgtg ccaacaaaag 240
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gcgcctggcc tactctggaa gttcatgggc agcaagtgtc ccaactctgg gataagtgct 360
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ggcgggggag acgagaatcg gtgtgttcgc ctctacagat caaaactcat ccttcaagtg 480

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tactcatctc agaggaagtc ctggcacccct gtgtgcccaag acgactggaa cgagaactac 540
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gtggatgaca ggggatccac cagctttatg aaactgaaca caagtgcggy oaatgtcgat 660
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acggactgga ttctatgaca aatgagggca gacggctaa 1479

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<210> 931
<211> 1476
<212> DNA
<213> Homo sapiens

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<400> 931
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acggactgga ttctatgaca aatgagggca gacggc 1476

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<210> 932
<211> 492
<212> PRT
<213> Homo sapiens

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<400> 932

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Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu  
 5 10 15  
 Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val  
 20 25 30  
 Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro  
 35 40 45  
 Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val  
 50 55 60  
 Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys  
 65 70 75 80  
 Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val  
 85 90 95  
 Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys  
 100 105 110  
 Cys Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn  
 115 120 125  
 Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp  
 130 135 140  
 Glu Asn Arg Cys Val Arg Leu Tyr Gly Ser Asn Phe Ile Leu Gln Val  
 145 150 155 160  
 Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp  
 165 170 175  
 Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn  
 180 185 190  
 Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser  
 195 200 205  
 Phe Met Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys  
 210 215 220  
 Leu Tyr His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg  
 225 230 235 240  
 Cys Ile Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile  
 245 250 255  
 Val Gly Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser  
 260 265 270  
 Leu His Val Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro  
 275 280 285  
 Glu Trp Ile Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn  
 290 295 300  
 Pro Trp His Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met  
 305 310 315 320  
 Phe Tyr Gly Ala Gly Tyr Gln Val Glu Lys Val Ile Ser His Pro Asn  
 325 330 335  
 Tyr Asp Ser Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln  
 340 345 350  
 Lys Pro Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn  
 355 360 365  
 Pro Gly Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp  
 370 375 380  
 Gly Ala Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala  
 385 390 395 400  
 Lys Val Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr  
 405 410 415  
 Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly  
 420 425 430  
 Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser  
 435 440 445  
 Lys Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly  
 450 455 460

347

Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe  
 465 470 475 480  
 Thr Asp Trp Ile Tyr Arg Gln Met Arg Ala Asp Gly  
 485 490

<210> 933  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 933  
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 Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val  
 20 25 30  
 Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro  
 35 40 45  
 Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val  
 50 55 60  
 Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys  
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 Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val  
 85 90 95  
 Gly Ala Ala Leu  
 100

<210> 934  
 <211> 393  
 <212> PRT  
 <213> Homo sapiens

<400> 934  
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 Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn Pro Ser Asn  
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 Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp Glu Asn Arg  
 35 40 45  
 Cys Val Arg Leu Tyr Gly Ser Asn Phe Ile Leu Gln Val Tyr Ser Ser  
 50 55 60  
 Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp Asn Glu Asn  
 65 70 75 80  
 Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn Asn Phe Tyr  
 85 90 95  
 Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser Phe Met Lys  
 100 105 110  
 Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys Leu Tyr His  
 115 120 125  
 Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg Cys Ile Ala  
 130 135 140  
 Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile Val Gly Gly  
 145 150 155 160  
 Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser Leu His Val  
 165 170 175  
 Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro Glu Trp Ile  
 180 185 190

348

Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn Pro Trp His  
 193 200 205  
 Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met Phe Tyr Gly  
 210 215 220  
 Ala Gly Tyr Gln Val Glu Lys Val Ile Ser His Pro Asn Tyr Asp Ser  
 225 230 235 240  
 Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln Lys Pro Leu  
 245 250 255  
 Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn Pro Gly Met  
 260 265 270  
 Met Leu Gln Pro Gln Gln Leu Cys Trp Ile Ser Gly Trp Gly Ala Thr  
 275 280 285  
 Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala Lys Val Leu  
 290 295 300  
 Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr Asp Asn Leu  
 305 310 315 320  
 Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly Asn Val Asp  
 325 330 335  
 Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser Lys Asn Asn  
 340 345 350  
 Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly Cys Ala Lys  
 355 360 365  
 Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe Thr Asp Trp  
 370 375 380  
 Ile Tyr Arg Gln Met Arg Ala Asp Gly  
 385 390

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<220>  
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<400> 935  
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<220>  
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349

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22

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gccccggggg tgaagctcgc tgctttccct acctccttaa gtgactgcga aacgcccacc 180  
ggctgggaatt gctctggtta tgatgacaga gaaatgato tottcoctgt tgacaoccaa 240  
acctgtaaat ttgatgggga atgtttaaga attggagaca ctgtgacttg cgtctgtcag 300  
ttccagtgca scaatgacta tgtgcctgtg tgtggctcaa atggggagag ctaccagaat 360  
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gaagatgcgc aggatgtctg gtgtgtgtgt aatattgact gtttccaaac caacttcaat 600  
ccccctctgg ottctgatgg gaaatcttat gtaaatgcat gccaaatcaa agagagctcg 660  
tgtcaaaaac aggaagaatat tgaagtcatg tctttgggtc gatgtcaaga taacaaacct 720  
acaactacta agctgcagaa tgggcattat gcaagaacag attatgcaga gaattgtcaac 780  
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ctgtgttata ctggcacaaca ctgtgaaaaa aaggactaca gtgttctata cgttgttccc 960  
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gtcaactgtg ttgtgtgtct ctgcatacaca aggaantgoc ccagaagcaa cagaattcac 1080  
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<212> DNA  
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gaatgtttta gatttggaag cactgtgact tgcgtctctg agtccaaagt caacaatgac 180  
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gcaggtatcag gatctggaga tggagtccat gaaggtctct gagaactag tcaaaaggag 360  
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gagcatctca tcaatgtgca ggagccatct tgcaggtgtg atgctgttta tactggacaa 780  
cautgtgaaa aaaggacta cagtgttcta taegtgttgc ccgttctgt acgatttcag 840  
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ctctgaatca caagaaatg cccacagaag acagaattc acagacaga gcaaaataca 960  
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350

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 940

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          20          25          30
Thr Asn Thr Cys Lys Phe Asp Gly Glu Cys Leu Arg Ile Gly Asp Thr
          35          40          45
Val Thr Cys Val Cys Gln Phe Lys Cys Asn Asn Asp Tyr Val Pro Val
          50          55          60
Cys Gly Ser Asn Gly Glu Ser Tyr Gln Asn Glu Cys Tyr Leu Arg Gln
          65          70          75
Ala Ala Cys Lys Gln Gln Ser Glu Ile Leu Val Val Ser Gln Gly Ser
          80          85          90
Cys Ala Thr Asp Ala Gly Ser Gly Ser Gly Asp Gly Val His Glu Gly
          95          100          105
Ser Gly Glu Thr Ser Gln Lys Glu Thr Ser Thr Cys Asp Ile Cys Gln
          110          115          120
Phe Gly Ala Glu Cys Asp Glu Asp Ala Glu Asp Val Trp Cys Val Cys
          125          130          135
Asn Ile Asp Cys Ser Gln Thr Asn Phe Asn Pro Leu Cys Ala Ser Asp
          140          145          150
Gly Lys Ser Tyr Asp Asn Ala Cys Gln Ile Lys Glu Ala Ser Cys Gln
          155          160          165
Lys Gln Glu Lys Ile Glu Val Met Ser Leu Gly Arg Cys Gln Asp Asn
          170          175          180
Thr Thr Thr Thr Thr Lys Ser Glu Asp Gly His Tyr Ala Arg Thr Asp
          185          190          195
Tyr Ala Glu Asn Ala Asn Lys Leu Glu Glu Ser Ala Arg Glu His His
          200          205          210
Ile Pro Cys Pro Glu His Tyr Asn Gly Phe Cys Met His Gly Lys Cys
          215          220          225
Glu His Ser Ile Asn Met Gln Glu Pro Ser Cys Arg Cys Asp Ala Gly
          230          235          240
Tyr Thr Gly Gln His Cys Gln Lys Lys Asp Tyr Ser Val Leu Tyr Val
          245          250          255
Val Pro Gly Pro Val Arg Phe Gln Tyr Val Leu Ile Ala Ala Val Ile
          260          265          270
Gly Thr Ile Gln Ile Ala Val Ile Cys Val Val Val Leu Cys Ile Thr
          275          280          285
Arg Lys Cys Pro Arg Ser Asn Arg Ile His Arg Gln Lys Gln Asn Thr
          290          295          300
Gly His Tyr Ser Ser Asp Asn Thr Thr Arg Ala Ser Thr Arg Leu Ile
          305          310          315
                    320          325          330          335

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&lt;210&gt; 941

&lt;211&gt; 381

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 941

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Met Gln His His His His His Val Leu Trp Glu Ser Pro Arg Gln
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Cys Ser Ser Trp Thr Leu Cys Glu Gly Phe Cys Trp Leu Leu Leu
          20          25          30

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351

Pro Val Met Leu Leu Ile Val Ala Arg Pro Val Lys Leu Ala Ala Phe  
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 Pro Thr Ser Leu Ser Asp Cys Gln Thr Pro Thr Gly Trp Asn Cys Ser  
 50 55 60  
 Gly Tyr Asp Asp Arg Glu Asn Asp Leu Phe Leu Cys Asp Thr Asn Thr  
 65 70 75 80  
 Cys Lys Phe Asp Gly Glu Cys Leu Arg Ile Gly Asp Thr Val Thr Cys  
 85 90 95  
 Val Cys Gln Phe Lys Cys Asn Asn Asp Tyr Val Pro Val Cys Gly Ser  
 100 105 110  
 Asn Gly Glu Ser Tyr Gln Asn Glu Cys Tyr Leu Arg Gln Ala Ala Cys  
 115 120 125  
 Lys Gln Gln Ser Glu Ile Leu Val Val Ser Glu Gly Ser Cys Ala Thr  
 130 135 140  
 Asp Ala Gly Ser Gly Ser Gly Asp Gly Val His Gln Gly Ser Gly Glu  
 145 150 155 160  
 Thr Ser Gln Lys Glu Thr Ser Thr Cys Asp Ile Cys Gln Phe Gly Ala  
 165 170 175  
 Glu Cys Asp Glu Asp Ala Glu Asp Val Trp Cys Val Cys Asn Ile Asp  
 180 185 190  
 Cys Ser Gln Thr Asn Phe Asn Pro Leu Cys Ala Ser Asp Gly Lys Ser  
 195 200 205  
 Tyr Asp Asn Ala Cys Gln Ile Lys Glu Ala Ser Cys Gln Lys Gln Glu  
 210 215 220  
 Lys Ile Gln Val Met Ser Leu Gly Arg Cys Gln Asp Asn Thr Thr Thr  
 225 230 235 240  
 Thr Thr Lys Ser Glu Asp Gly His Tyr Ala Arg Thr Asp Tyr Ala Glu  
 245 250 255  
 Asn Ala Asn Lys Leu Glu Glu Ser Ala Arg Glu His His Ile Pro Cys  
 260 265 270  
 Pro Glu His Tyr Asn Gly Phe Cys Met His Gly Lys Cys Glu His Ser  
 275 280 285  
 Ile Asn Met Gln Glu Pro Ser Cys Arg Cys Asp Ala Gly Tyr Thr Gly  
 290 295 300  
 Gln His Cys Glu Lys Lys Asp Tyr Ser Val Leu Tyr Val Val Pro Gly  
 305 310 315 320  
 Pro Val Arg Phe Gln Tyr Val Leu Ile Ala Ala Val Ile Gly Thr Ile  
 325 330 335  
 Gln Ile Ala Val Ile Cys Val Val Val Leu Cys Ile Thr Arg Lys Cys  
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 Pro Arg Ser Asn Arg Ile His Arg Gln Lys Gln Asn Thr Gly His Tyr  
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 Ser Ser Asp Asn Thr Thr Arg Ala Ser Thr Arg Leu Ile  
 370 375 380

&lt;210&gt; 942

&lt;211&gt; 45

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 942

ctgtgtggcga acggcagaat gctacacgtg ctgcagtcgc tgaac

45

&lt;210&gt; 943

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 943

Leu Leu Ala Asn Gly Arg Met Pro Thr Val Leu Gln Cys Val Asn  
5 10 15



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